

WHAT IS CLAIMED IS:

1. An image transfer printing apparatus, comprising:
a member having an imaging transfer surface;

an applicator assembly distributing a liquid layer onto the imaging transfer surface to produce an intermediate transfer surface; said applicator
5 assembly including a porous member having a core, said core having openings defined therein, a liquid supply system connected to said core for supplying liquid to saturate said porous member.

2. The image transfer printing apparatus of claim 1, further
10 comprising means for supporting said porous member in contact with said member to release and form said liquid layer.

3. The image transfer printing apparatus of claim 1, further
comprising an ink-jet printhead depositing a molten phase-change ink in a phase-
15 change ink image on the intermediate transfer surface; and
means for transferring the phase change ink from the intermediate transfer surface to a receiving medium.

4. The image transfer printing apparatus of claim 1, further
20 comprising a replenishing system associated with said liquid supply system, for maintaining said porous member impregnated with a predefined amount of liquid.

5. The image transfer printing apparatus of claim 4, wherein said
replenishing system includes a sensing system for sensing an amount of liquid
25 impregnated in said porous member.

6. The image transfer printing apparatus of claim 5, wherein said replenishing system includes a controller, responsive to said sensing system, for activating said liquid supply system when said porous member is impregnated with liquid below said predefined amount of liquid.

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7. The image transfer printing apparatus of claim 6, wherein said sensing system includes means for sensing mass of said porous member and generating a signal indicative of the amount of liquid impregnated in said porous member.

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8. The image transfer printing apparatus of claim 1, wherein said porous member is a foam roller.

9. The image transfer printing apparatus of claim 1, wherein said member is an imaging member.

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10. The image transfer printing apparatus of claim 1, wherein said member is a fuser member.

11. A printing apparatus, comprising:
a member having an imaging transfer surface;
an applicator assembly distributing a liquid layer onto the imaging transfer surface to produce an intermediate transfer surface; said applicator assembly including a porous member having a core, said core having openings defined therein, a liquid supply system connected to said core for supplying liquid to saturate said porous member.

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12. The printing apparatus of claim 11, further comprising means for supporting said porous member in contact with said member to release and form said liquid layer.

5 13. The printing apparatus of claim 11, further comprising an ink-jet printhead depositing a molten phase-change ink in a phase-change ink image on the intermediate transfer surface; and

means for transferring the phase change ink from the intermediate transfer surface to a receiving medium.

10 14. The printing apparatus of claim 11, further comprising a replenishing system associated with said liquid supply system, for maintaining said porous member impregnated with a predefined amount of liquid.

15 15. The printing apparatus of claim 14, wherein said replenishing system includes a sensing system for sensing an amount of liquid impregnated in said porous member.

20 16. The printing apparatus of claim 15, wherein said replenishing system includes a controller, responsive to said sensing system, for activating said liquid supply system when said porous member is impregnated with liquid below said predefine amount of liquid.

25 17. The printing apparatus of claim 16, wherein said sensing system includes means for sensing mass of said porous member and generating a signal indicative of the amount of liquid impregnated in said porous member.

18. The printing apparatus of claim 11, wherein said porous member is a foam roller.

19. The printing apparatus of claim 11, wherein said member is an imaging member.

5 20. The printing apparatus of claim 11, wherein said member is a fuser member.